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(71) Applicant (for all designated States except US): **LOTUS
CARS LIMITED** [GB/GB]; Hethel, Norwich, Norfolk
NR14 8EZ (GB).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **KENCHINGTON,**

Steven [GB/GB]; 1 Old Hall Close, Ashwellthorpe, Nor-
wich, Norfolk NR16 1EY (GB). **KUDEROVITCH, Si-
mon, Paul** [GB/GB]; 12 Wright Drive, Scarning, Dereham,
Norfolk NR19 2TS (GB).

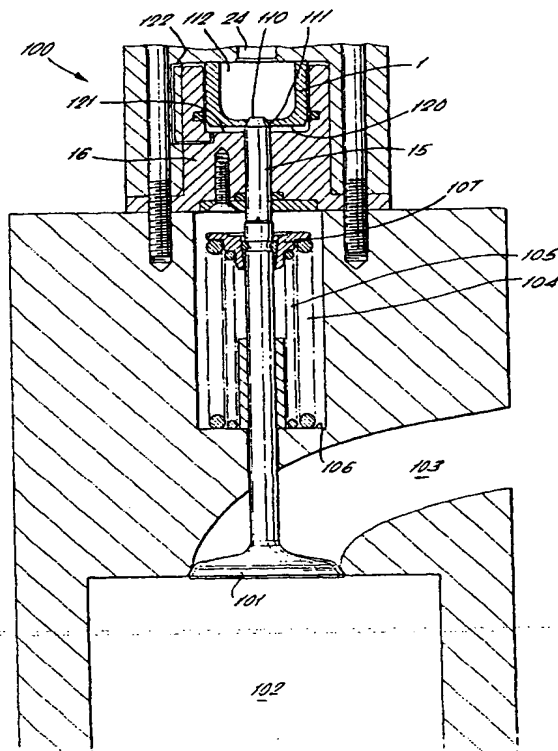
(74) Agents: **PLUCKROSE, Anthony, William et al.**; Boulton
Wade Tennant, Verulam Gardens, 70 Gray's Inn Road,
London WC1X 8BT (GB).

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(54) Title: AN ARRANGEMENT OF AN INTERNAL COMBUSTION ENGINE POPPET VALVE AND AN ACTUATOR THEREFOR



(57) Abstract: The present invention (with reference to figure 1) is an arrangement of an internal combustion engine poppet valve and a hydraulic actuator therefor comprising: an actuator housing (16); spring means (104, 105) for biasing the poppet valve (101) into engagement with a valve seat therefor; a first piston (1) of a first cross-sectional area slidable in a first chamber formed in the actuator housing (16), the first piston (1) having a passage therethrough for the flow of hydraulic fluid; and a second piston (15) of a second cross-sectional area smaller than the first cross-sectional area slidable in a second chamber formed in the actuator housing (16), the second chamber opening on to the first chamber; wherein: the first chamber is connectable to a pressurised hydraulic fluid supply line and to a hydraulic fluid return line; and the second piston has an upper surface (110) engageable by a lower surface of the first piston; and the first piston is configured without a passage which is both aligned with the second piston and which has a portion of constant cross-sectional area greater than the said second cross-sectional area.



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